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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,464	01/02/2002	Hui Cheng	106809	6600
27074	7590	11/03/2004	EXAMINER	
OLIFF & BERRIDGE, PLC. P.O. BOX 19928 ALEXANDRIA, VA 22320			KASSA, YOSEF	
			ART UNIT	PAPER NUMBER
			2625	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/032,464	CHENG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	YOSEF KASSA	2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>01/02/2002</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al (U.S. Patent 5,583,659).

With regard to claim 1, Lee et al discloses a structuring element A for detecting (see col. 7, lines 9-10, that is, the process of determining the center pixel value and pixel around the center pixel reads on structuring element) and removing speckles, i.e., noise, from a scanned image (see col. 5, lines 4-11) comprising an annular window shape, i.e., surround pixel, comprising two squares of different sizes sharing the same geometric center point (see Fig. 3C, shows two squares of different sizes sharing the same geometric center point), wherein the pixel to be evaluated is at the center point of the structuring element A (see col. 7, lines 35-45, shows the center of the pixel (i,j) of element 3C is compared (evaluated)).

With regard to claim 2, Lee et al discloses wherein an inner square of the structuring element A has a side dimension N (see Fig. 3C, shows the inner square side has dimension of N-2), and an outer square has a side dimension M (the outer square has dimension of N in Fig. 3C), wherein N represents a largest speckle that can be removed and M represents a distance the speckle lies from other objects (see col. 7, lines 36-51).

With regard to claim 3, Lee et al discloses wherein  $M(N)$  is at least equal to  $N+2$  (see Fig. 3C).

With regard to claim 4, Lee et al discloses wherein a domain of the structuring element  $A$ ,  $D[A]$ , is a region between the two squares sharing the same center (see Fig. 3C, shows the element 370 and 350 sharing the same center  $(l,j)$ ).

With regard to claim 5, Lee et al discloses wherein the domain of the structuring element  $A$  has a constant value of zero over the entire domain (see col. 12, lines 59-64).

#### ***Allowable Subject Matter***

2. Claims 6-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Other Prior Art Cited***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (6,393,150) to Lee et al discloses region based image binarization system.

US Patent No. (6,317,223) to Rydak et al discloses image processing system for reducing vertically disposed patterns on images produced by scanning.

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US Patent No. (6,282,326) to Lee et al discloses artifact removal technique for skew corrected images.

US Patent No. (5,517,234) to Gerber et al discloses automatic optical inspection system having a weighted transition database.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communication and (703) 872-9306 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

### **PATENT EXAMINER**

Yosef Kassa



10/22/03.